

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A silicon/silicon carbide composite comprised of 45 to 75 weight % of silicon and 25 to 55 weight % of silicon carbide, said silicon carbide ~~being formed from~~ consisting essentially of an assembly of fibers each having a thickness of 150 μm or less and a length of 0.8 to 3.5 mm, said composite having a surface on which a silicon carbide film having a thickness of 30 to 500 μm is formed.
2. (Currently Amended) A silicon/silicon carbide composite according to claim 1, wherein said silicon/silicon carbide composite contains carbon left without reaction therein in an amount of 0.25 % by weight or less ~~includes a silicon carbide film having a thickness of 30 to 500 μm formed on a surface thereof~~.
3. (Currently Amended) A silicon/silicon carbide composite according to claim 1, wherein said silicon/silicon carbide composite ~~includes a dummy wafer with a~~ contains the silicon carbide film having a thickness of 30 to 150 μm ~~formed on the surface thereof, said to form~~ a dummy wafer having a total thickness of 0.5 mm to 1 mm.
4. (Currently Amended) A silicon/silicon carbide composite according to claim 1, wherein said silicon/silicon carbide composite ~~includes~~ is a semiconductor heat treatment member.
5. (Currently Amended) A silicon/silicon carbide composite ~~according to claim 3~~ consisting essentially of 45 to 75 % by weight of silicon and 25 to 55 % by weight of silicon carbide, said silicon carbide consisting essentially of an assembly of fibers each having a thickness of 150 μm or less and a length of 0.8 to 3.5 mm, said composite having a surface on which a silicon carbide film having a thickness of 30 to 500 μm is formed ~~wherein said silicon/silicon carbide composite includes a semiconductor heat treatment member~~.
6. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite comprising a first step in which cellulose fibers each having a fiber thickness of 150 μm or less are heated

at a temperature of 500°C to 1500°C in a non-oxidizing atmosphere to obtain a porous carbon body having a bulk density of 0.10 to 0.80 g/cm³;

and a second step in which said porous carbon body is silicified in an atmosphere containing silicon.

10. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 9, wherein said thickness of each cellulose fiber is within a range of 5 to 80 µm.

11. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 9 or 10, wherein the length of each cellulose fiber is 1.5 mm or more.

12. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 9, wherein said cellulose fiber is paper pulp.

13. (Withdrawn) A process of manufacturing a silicon/silicon carbide composite according to claim 9, wherein said cellulose fiber is paper pulp.

14. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 9, wherein the bulk density of the porous carbon body produced by said first step is 0.70 g/cm³ or less.

15. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 9, in which a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

16. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 9, wherein a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

17. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 11, wherein a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

15. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~6~~, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

16. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~8~~, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

17. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~12~~, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

18. (Currently Amended) A silicon/silicon carbide composite according to claim ~~2-5~~, wherein said silicon/silicon carbide composite includes is a dummy wafer with a the silicon carbide film having a thickness of 30 to 150 μm formed on the surface thereof, said dummy wafer having a total thickness of 0.5 to 1 mm.

19. (Currently Amended) A silicon/silicon carbide composite according to claim ~~2-5~~, wherein said silicon/silicon carbide composite includes is a semiconductor heat treatment member.

20. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~1~~, wherein the length of each cellulose fiber is 1.5 mm or more.

21. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~1~~, wherein said cellulose fiber is paper pulp.

22. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~1~~, wherein the bulk density of the porous carbon body produced by said first step is 0.70 g/cm^3 or less.

23. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 10, wherein the bulk density of the porous carbon body produced by said first step is 0.70 g/cm³ or less.

24. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 7, in which a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

25. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 10, in which a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

26. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 7, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

27. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 10, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

28. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 10, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

29. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim 10, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

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30. (New) A silicon/silicon carbide composite according to claim 5, wherein said silicon/silicon carbide composite contains carbon left without reaction therein in an amount of 0.25 % by weight or less.